

App. No.: 09/966,757

Amendment dated: December 7, 2010

Reply to non-final office action of September 7, 2010

Amendments to the Drawings:

The attached 17 new sheets of drawings include new Figs. 34, 35a-35g, 36a-36g, and 37a-37b.

Attachment: New Sheets

REMARKS/ARGUMENTS

The Office Action of February 14, 2011, has been carefully reviewed and these remarks are responsive thereto. With entry of this paper, claim 24 is amended, and claims 27, 28, 31, 32, 35, 36, 39, and 40 are canceled without prejudice or disclaimer. No new matter has been added. Claims 1-6, 8-16, 18-20, 22, 24, 26, 28, 30, 34, and 38 thus remain pending in this application. Reconsideration and allowance of the instant application are respectfully requested.

Personal Interview

Applicants wish to thank Examiner Shelcheda for the courtesies extended to their representative during the personal interview on April 13, 2011. Applicants agree with the Examiner's Interview Summary and adopt the same as Applicants' statement of substance of interview in accordance with MPEP § 713.04.

Amendments to the Specification and Figures

The specification and figures have been amended to explicitly incorporate portions of parent U.S. Pat. App. 07/991,074, which is incorporated by reference on page 2 of the specification as originally filed. Added portions include figures 52e, 55a-55g, 56a-56g, and 57a-57b of the '074 patent application, which have been changed to figures 34, 35a-35g, 36a-36g, and 37a-37b, respectively. Detailed description from pages 47 and 116-125 of the '074 patent application has also been added.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 27, 31, 32, 35, 36, 39, and 40 stand rejected under 35 U.S.C. 112, first paragraph for failing to comply with the written description requirement. These claims have been canceled, thus rendering the rejection moot.

Claims 1-6, 8-16, 18-20, 22, 24, 26-28, 30-32, 34-36, and 38-40 stand rejected under 35 U.S.C. 112, first paragraph for failing to comply with the enablement requirement. Applicants respectfully traverse.

The Office Action on pages 2-6 asserts that the specification fails to provide enabling support for the claims 1, 8, 22, and 24 feature of receiving a video channel “including a split screen with multiple video clips positioned in different portions of the split screen.” As discussed and agreed to during the telephonic interview, the specification as originally filed provides enabling support for this feature.

The Office Action on pages 2-6 further asserts that the specification fails to provide enabling support for:

- the claim 1 feature of “wherein the single video clip is repositioned from one of the different portions of the split screen to a position in the menu”;
- the claim 8 feature of “ wherein the single video clip is repositioned from one of the different portions of the split screen to a position in the menu”;
- the claim 22 feature of “wherein ... a single video clip of the multiple video clips is repositioned from one of the different portions of the split screen to a position in one of the menus”; and
- the claim 24 feature of “displaying an electronic program guide with a single video clip of the multiple video clips repositioned from one of the different portions of the split screen to a position in the electronic program guide.”

The Office Action also asserts that the scaling features of claims 26, 30, 34, and 38 are also not enabled (although the Office Action does not identify these claims explicitly). Applicants respectfully disagree.

As indicated in MPEP 2164.01, the test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation. MPEP 2164.01 further points out that even the background section that discusses or even disparages the subject matter can be enabling.

In view of this test, Applicants submit that enabling disclosure is provided in the figures and specification of the present application as amended to incorporate portions of parent U.S. Pat. App. No. 07/991,074. The specification provides enabling support at least as follows:

Figures 37a-37b. Figures 37a-37b illustrate use of split screen techniques in accordance with various aspects of the disclosure.

(See Amendments to the Specification, lines 8-9, underscore added)

A video screen is divided into picture elements known as pixels. Images define one pixel at a time are referred to as "bit-mapped" images. Most compression techniques take the bit-mapped images and convert them into a series of mathematical algorithms both to reduce storage space and to allow for the mathematical manipulation of images that is often not possible with analog formats. This is possible because many images have pixels that repeat themselves. (See U.S. Pat. App. No. 09/966,757, pp. 17-18, underscore added)

However, in the preferred embodiment, a great deal of short promos or demo video are sent using a split screen technique on a dedicated channel. ... Using a split screen technique, any number of different video clips may be sent (e.g. 2,4,6,8). To show the video clip on a menu, the video must either be scaled and redirected to a video window on a menu screen or a masking methodology can be used. Masking (See U.S. Pat. App. No. 09/966,757, p. 30, underscore added)

The text and graphics video plane combiner in upgrade module 700 allows the demultiplexed and decompressed signal to be output, through simple decompression box 720, to a subscriber's television with both video and overlay menus with text. (See U.S. Pat. App. No. 09/966,757, p. 38, underscore added)

Initially, microprocessor 602 instructs tuner 603 to select a channel. The channel is decompressed, and error corrected and decrypted, if necessary. If the video is to be reduced in size, so as to be placed within a video window 1556, or is a split screen video window which must be enlarged, the video is scaled to the appropriate size. Additionally, the video may be required to be redirected to a portion of the television screen. This is done by creating a series of offsets for each pixel location of the video. ... Video combiner 886 combines the video (if any) with as many screens of a decompressed graphics as are necessary, and any text. The image or portions of the image are stored in combiner 886 until all overlays are received by combiner 886. ... Thereafter, the entire image is sent, under direction of another routine, to be displayed on the television screen, as represented by display block 888. (See U.S. Pat. App. No. 09/966,757, p. 41-42, underscore added)

Most overlays cover small portions of the screen allowing the subscriber to continue to comfortably view his program selection. Other Overlays which are by their nature more important than the program being viewed will overlay onto greater portions of the screen. In the preferred embodiment, some Program

Overlay Menus 1390 reduce or scale down the entire programs video screen and redirect the video to a portion of the screen. (See U.S. Pat. App. No. 09/966,757, p. 49, underscore added)

Figure 34 includes an interactive submenu, which includes an example of taking a complete television program video, scaling it down to a smaller size and directing the video into a video window of a submenu. The process for creating the interactive submenu in figure 34 may include selecting a video channel, decompressing the video channel, scaling the video to change its size, and redirecting the video to change its location. (See Amendments to the Specification, lines 12-17, underscore added)

In the preferred embodiment, the video window 1556 shows a moving video picture. For the hit movies category, the moving video picture may be obtained directly from a current feed of the described movie. For example, the movie video 1560 shown may be taken directly off of a channel which is currently showing the movie Terminator. The set top terminal 220 would decompress the channel with the movie Terminator and then manipulate the video signal to place it in the video window 1556. This manipulation of the video signal includes scaling down the size of the video screen and redirecting the video to a portion of the menu screen which is within the video window of the menu.

Another method of getting the moving video to the video window portion of the submenu, is to obtain the video from a split screen channel. This method involves the use of split screen video techniques to send multiple video clips on a single channel at a given time. For example, a channel may be divided into eight portions of screen space and one of the eight positions may carry the Terminator video clip. The set top terminal 220 would decompress the channel and manipulate on the one-eighth portion of the screen desired in the video window of the submenu. The set top terminal 220 would scale the one-eighth picture, if necessary, and redirect it to the correct position on the screen using known scaling and positioning techniques. Additional circuitry may be required in the set top terminal 220 to perform adequate scaling and repositioning.

Figure 36g shows the final product resulting from the combining of Figures 36a through 36f. The combiner 624 integrates each of these portions of information into a single menu screen 1120.

The combiner 624 which displays the menus on the television screen obtains information primarily from three locations, the graphics generator 622, the text generator 621, and the video decompressor 618 (with other video manipulation equipment, if necessary) ... The video signal which is sent to the combiner 624 may come directly from one or more video decompressors or ancillary video manipulation equipment.

One of the methods for video clips or promotional video to be sent to the set top terminal 220 is through the use of split screen video techniques. Figure 37a shows the throughput of a single channel using a split screen video technique to

divide the channel into four parts. In this manner, four different video clips may be simultaneously sent on a single channel. Program description submenus can acquire one of the video dips shown on the split channel at any given time. Generally, this requires the set top terminal 220 to decompress the entire channel, acquire one-fourth of the video information, scale the video (if necessary), and redirect the video. Using this split screen technique 1602, numerous video clips may be sent over a limited number of channels.

Figure 37b shows an embodiment 1604 in which forty eight different video dips are sent simultaneously on a single channel using split screen video techniques. In this embodiment, the video signal may need to be scaled upwardly to enlarge the picture for viewing in a video window or on a full screen. (See Amendments to the Specification, lines 154-205, underscore added)

The specification, as noted above, describes a split video screen being received on a single channel, discusses the details of how the video screen is made up of pixels, describes the details of receiving, decompressing, error correcting, etc. a single channel, discloses the scaling of the channel, and discloses the redirecting of a portion of the channel by creating an offset of each pixel location. Applicants respectfully submit that this detailed disclosure provides sufficient detail to enable one of skill in the art to make or use Applicants' invention without undue experimentation.

The Office Action on page 3 also takes note that the specification does not disclose hardware capable of identifying one single video clip from a plurality of video clips received in a split screen, and then scaling and repositioning the one video clip. The cited portion is copied below.

However, using the masking technique without any video redirecting causes each video clip to be located in a different position on the screen. It also requires the masking to be different for each video clip and makes consistent format difficult. Scaling and redirecting video is generally difficult, expensive and requires additional hardware. (See U.S. Pat. App. No. 09/966,757, p. 30-31)

This cited portion compares the scaling and redirecting process to a different "masking" process. Applicants respectfully submit that the specification does not indicate that the disputed repositioning and scaling features are beyond the ability of one of ordinary skill in the art. Instead, the specification clearly teaches that one of ordinary skill in the art may use additional hardware to implement the disputed features. Applicants are not required to explicitly disclose

the hardware for repositioning and scaling when one of ordinary skill in the art can make and use such hardware without undue experimentation at the time the application was filed. See MPEP 2164.01. Such is the case here. As evidence, Applicants point to U.S. Pat. No. 5,283,561, which is submitted herewith in an Information Disclosure Statement. U.S. Pat. No. 5,283,561 has a prior art date of February 24, 1989, under 35, U.S.C. 102(e).

The '561 patent discloses a digital-television circuit for producing pixel data that permits rapid scaling and positioning of live television images on a graphics display. (See U.S. Pat. No. 5,283,561, Abstract, col. 1 lines 27-34). To perform the scaling and positioning, the '561 patent provides a method of scaling and positioning and provides detailed circuit diagrams in Figs. 5-7, which perform the method. See U.S. Pat. No. 5,283,561, col. 5 lines 13-41, col. 6 line 54 – col. 7 line 37, col. 11 lines 43-48, col. 12 lines 39-44, col. 13 lines 22-24, and col. 13 lines 56-61.

As evidenced by U.S. Pat. No. 5,283,561, and as provided in the amended specification, the claims are enabled to permit one of ordinary skill in the art to make or use the claimed inventions, without undue experimentation. Accordingly, Applicants respectfully request that the § 112, first paragraph, rejection for lack of enablement be withdrawn.

CONCLUSION

All issues having been addressed, Applicant respectfully submits that the instant application is in condition for allowance, and respectfully solicits prompt notification of the same. However, if for any reason the Examiner believes the application is not in condition for allowance or there are any questions, the Examiner is requested to contact the undersigned at (202) 824-3307.

Respectfully submitted,
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